

- \*1. You invest \$2,400 into a Roth IRA that has an annual interest rate of 10% compounded annually. How much will you have in 30 years? 60 years?
- \*2. Katie invests \$15,000 into an account earning 8.5% compounded continuously. How much will she have in 15 years?
- \*3. Kelly wants to start investing \$100 a month for the next 30 years. The account earns 10% interest compounded annually. How much will he have after 40 years?  
How much more would he have if he continues to invest \$100 a month for the full 40 years?

Graph the following functions.

\*4.  $f(x) = -2^{x+1} - 3$

Parent function \_\_\_\_\_

x	y

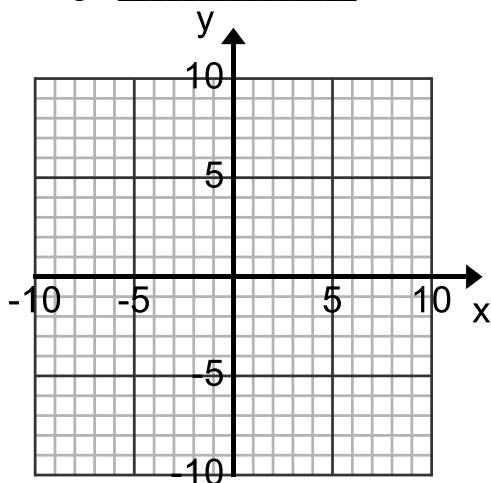
Description of transformation

x	y

y-int \_\_\_\_\_ asymptote \_\_\_\_\_

Domain \_\_\_\_\_

Range \_\_\_\_\_



\*5.  $f(x) = 3^{-x} + 4$

Parent function \_\_\_\_\_

x	y

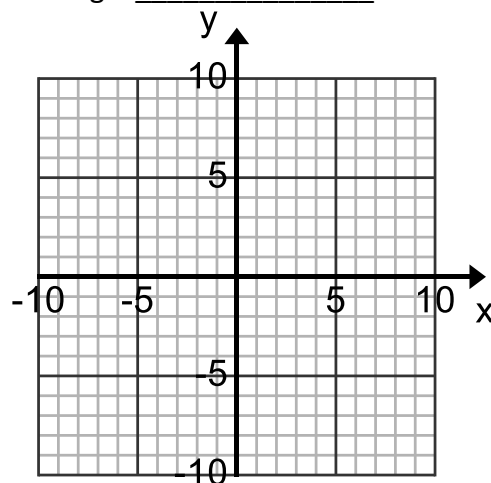
Description of transformation

x	y

y-int \_\_\_\_\_ asymptote \_\_\_\_\_

Domain \_\_\_\_\_

Range \_\_\_\_\_



\*6.  $f(x) = \frac{1}{2}^{2x+4} + 1$

Parent function \_\_\_\_\_

x	y
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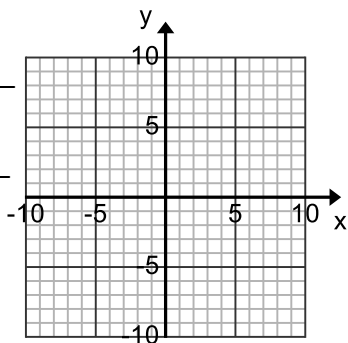
Description of transformation

x	y
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y-int \_\_\_\_\_ asymptote \_\_\_\_\_

Domain \_\_\_\_\_

Range \_\_\_\_\_



\*7.  $f(x) = 5^{x-2} + 3$

Parent function \_\_\_\_\_

x	y
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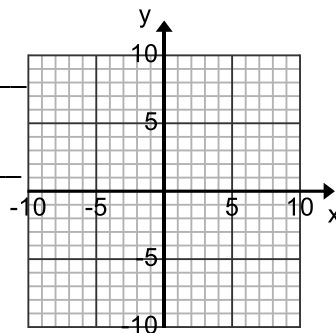
Description of transformation

x	y
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y-int \_\_\_\_\_ asymptote \_\_\_\_\_

Domain \_\_\_\_\_

Range \_\_\_\_\_



8.  $f(x) = e^{3x} + 4$

Parent function \_\_\_\_\_

x	y
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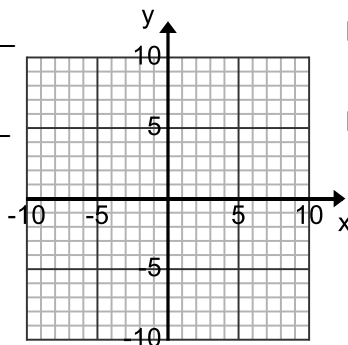
Description of transformation

x	y
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y-int \_\_\_\_\_ asymptote \_\_\_\_\_

Domain \_\_\_\_\_

Range \_\_\_\_\_



9.  $f(x) = 2e^{x-1} + 2$

Parent function \_\_\_\_\_

x	y
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Description of transformation

x	y
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y-int \_\_\_\_\_ asymptote \_\_\_\_\_

Domain \_\_\_\_\_

Range \_\_\_\_\_

